

Appendix D

Connectivity Assessment Paper

Assessment of Need for Missing Roadway Connections for the Mission Valley Community Plan Update

Issue: The Fenton Parkway connection over the San Diego River (to Camino del Rio North and Mission City Parkway), the Via Las Cumbres (VLC) roadway connection between Friars Road and Hotel Circle North and South, and the VLC interchange with I-8, are included in the adopted Mission Valley Community Plan and the Levi-Cushman Specific Plan. Analysis was conducted to determine whether these connections and interchange (modified version based on Caltrans Phase 2 Concept) should be recommended for inclusion in the Mission Valley Community Plan Update (MV CPU).

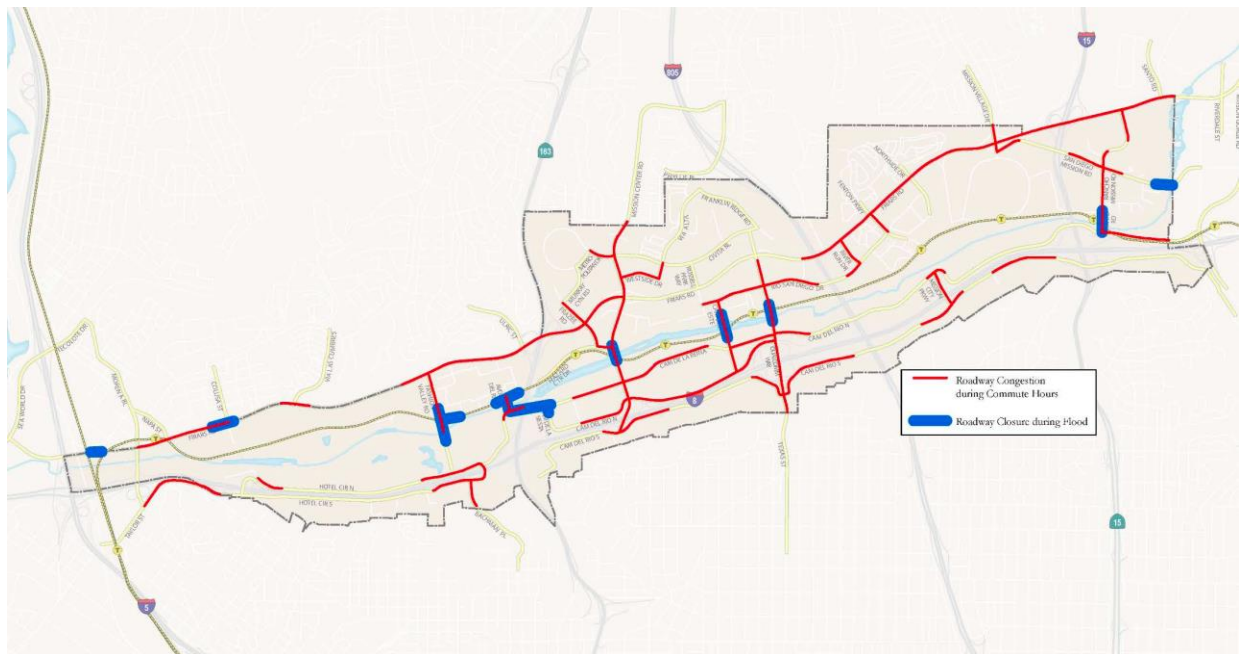
Conclusion: Based on the information below, staff recommends that the Via Las Cumbres roadway connection over the San Diego River and the VLC/I-8 interchange via Hotel Circle North/South (HCN/S) one-way couplet (per Caltrans Phase 2 Draft Concept), and the Fenton Parkway connection across the San Diego River, be included in the MV CPU to support the draft Plan’s growth in Mission Valley.

Context: Steep slopes, the San Diego River, five freeways, and the San Diego Trolley form barriers to connectivity within as well as to and from Mission Valley. This has resulted in a planned street network that consists of fewer and wider streets and intersections to accommodate the movement of people and goods, and less distributed/more concentrated traffic flows, making many of these streets and intersections barriers in and of themselves, especially for transit users, cyclists and pedestrians.

Analysis:

Flooding

During recurring flooding events in Mission Valley every street crossing the San Diego River (seven) and some roadways adjacent to the River (three) become impassable.



The only ways to travel across the San Diego River in Mission Valley during these events are via SR 163 and I-15. Since pedestrians and cyclists cannot use the freeway, they are unable to cross the river during flooding events.

Following are the surface streets that close due to flooding:

- Fashion Valley Road across river
- Riverwalk Drive (behind Fashion Valley Mall) adjacent to river
- Avenida del Rio across river
- Camino de la Reina from just west of Avenida del Rio to just east of Camino de la Siesta
- Mission Center Road across river
- Camino del Este across river
- Qualcomm Way across river
- Ward Road across river
- San Diego Mission Road across river
- Friars Road from west of Colusa to just east of Colusa Street

Following are transit services that are rerouted and impacted/delayed due to flooding:

- Significant flooding at Fashion Valley Road and Fashion Valley Transit Center has required transit operations to relocate to the Mission Valley Center Transit Station affecting all transit routes that utilize the Fashion Valley Transit Center. Flooding-related closures of the Fashion Valley Transit Center impact Routes 1, 6, 20, 25, 41, 88, 120, and 928, and may also require Sycuan Green Line service to bypass the station.
 - Route 6 normally uses Avenida Del Rio and the Fashion Valley Transit Center.
 - Routes 1, 88, and 120 normally use Fashion Valley Road to access the Fashion Valley Transit Center.
 - Route 14 normally uses Ward Road to access the Mission San Diego and Grantville Trolley Stations.
- Transit services not rerouted but impacted/delayed due to flooding:
 - Transit routes that are not rerouted during a flooding event are affected by increased traffic and congestion along their routes caused by the other rerouted vehicular traffic.

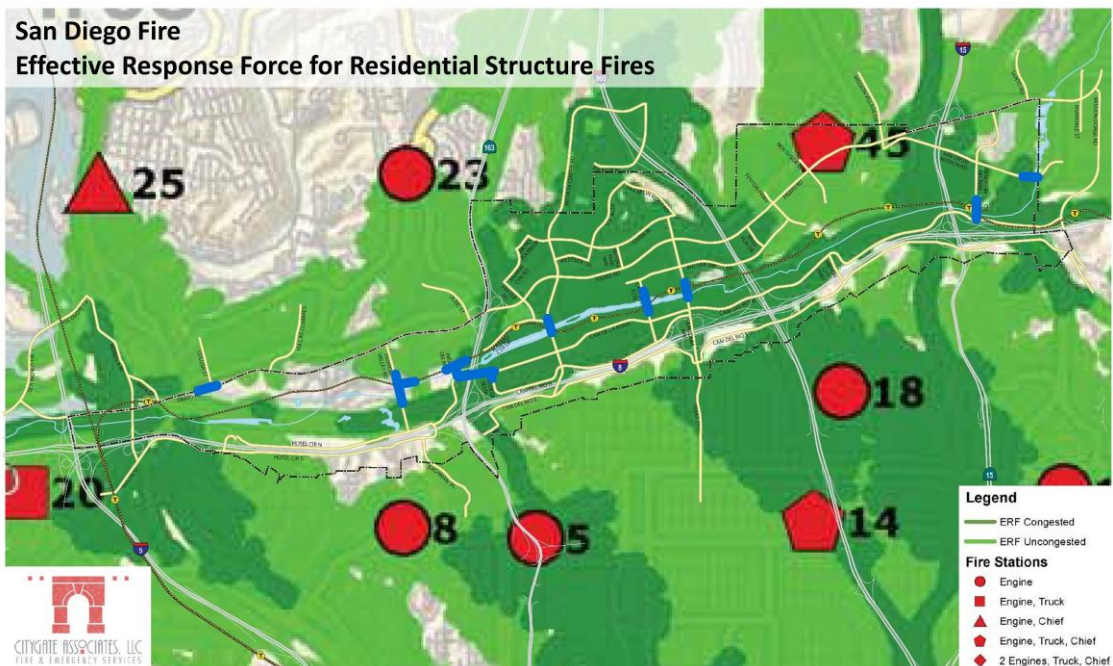
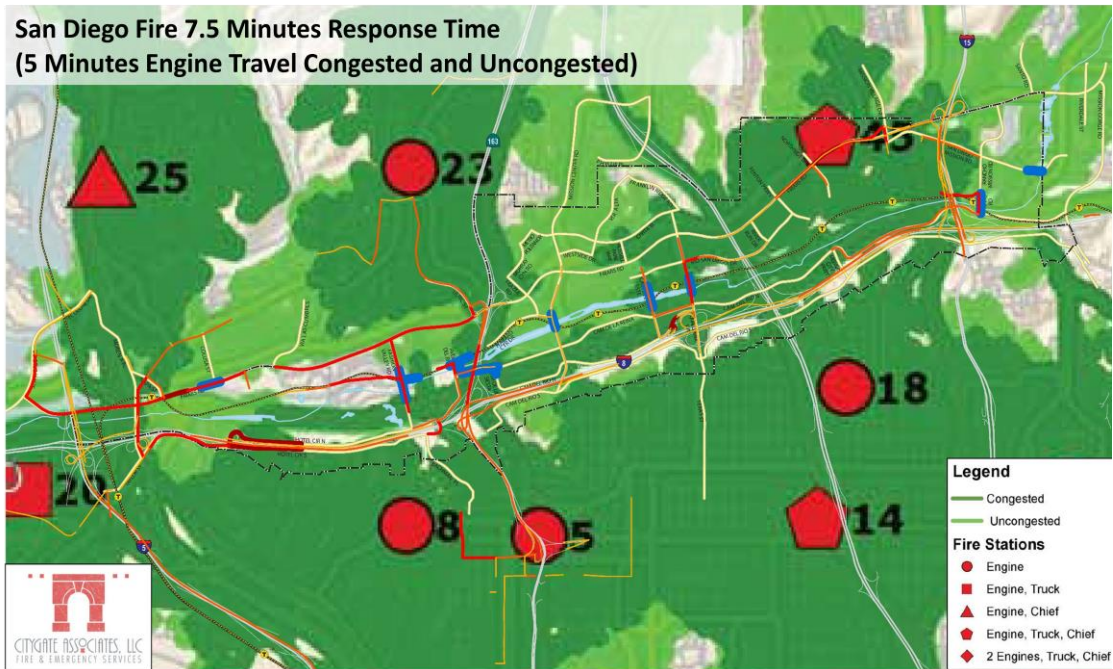
Emergency response concerns during flooding

- Emergency response during flooding events (for both flood-related emergencies/rescues and non-flood-related emergencies) is significantly hampered by a lack of north-south connectivity in the community.
- See below for general Public Safety and Emergency Response considerations, which are more critical during flooding events, due to the extensive street closures that occur.

Public Safety and Emergency Response considerations

- [Citygate Report](#) (2017) does not specifically call out any gaps in Mission Valley in their 2017 analysis however, the [Map Atlas](#) shows gaps in coverage within Mission Valley, specifically in:
 - Map 3b 5 Minute Engine Travel Congested and Uncongested (Pg. 17) – There is an apparent gap around the Riverwalk Golf Course (See map inserted below.);
 - Map 4b ISO 1.5 Mile Travel Distance – There are gaps at the Riverwalk Golf Course and central Mission Valley around Mission Center Road (See map inserted below.); and
 - Several other maps show some gap in coverage in the Riverwalk Golf Course.
- Connections would provide improved police, fire-rescue, lifeguard/swift-water rescue, and ambulance emergency response times.
- Connections would provide improved emergency transport times to hospitals.
- Connections would reduce the risk that an area of the community will become inaccessible if all or a part of a roadway is blocked.
- Connections would allow fire stations to serve a greater area; especially important when multiple stations are responding to incidents and/or covering for stations that are busy.

- Connections would provide multiple approach route options for emergency response and alternate routes for diverting traffic during emergencies that close road(s); important because there are often multiple responders to an incident who need to gain access from different directions to the area and stage.
- Connections would improve access to UCSD Medical Center.



Additional notes on public safety – emergency/disaster planning, response and recovery:

- The most frequently recurring hazard is flooding which has repeatedly closed every surface street that crosses the San Diego River in Mission Valley.

- Much of Mission Valley is in the very high fire hazard severity zone and is identified as a High Potential area for liquefaction in the Seismic Safety Study. (Links: [VHFHSZ](#), [Seismic Safety Study](#))
- Potential for multiple co-occurring incidents is greater, such as freeway/transportation incident on limited number of facilities during evacuation and/or disaster response.
- Climate change adaptation and resilience considerations.

Vehicular Traffic Capacity and Operations

- Connections provide more direct travel between destinations.
- Connections decrease travel distance/out-of-direction travel.
- Connections distribute traffic and reduce volumes on streets and at intersections.
- Connections provide safety benefits of reduced conflicts at intersections.
- Connections provide more route options/redundancy/resiliency during incidents, construction and maintenance activity.
- Connections better connect adjacent communities – Linda Vista, Old Town, and Uptown to MV and each other.

Via Las Cumbres connection over San Diego River and Interchange with I-8 via Hotel Circle North and South one-way reconfiguration in Mission Valley

Projected Via Las Cumbres Average Daily Traffic (ADT) Volumes:

- 19,400 ADT over San Diego River;
- 23,200 ADT from Street B to HCN; and
- 30,300 ADT between Hotel Circle North and South.

Forecast Diverted Traffic Volumes without VLC & I-8/HCN/S Interchange			
Freeway or Roadway Segment	VLC IN Unadjusted ADT	VLC OUT Unadjusted ADT	Delta ADT
SR 163 Southbound	71,700	75,000	3,300
Friars Road west of SR 163	50,300	52,300	2,000
Friars Road east of Napa	18,900	23,700	4,800
Fashion Valley Road	7,800	11,600	3,800
FV Mall Dwy behind Mall	14,600	19,000	4,400
Avenida Del Rio	16,900	20,600	3,700
Camino de la Reina	13,500	15,600	2,100
Hotel Circle North	15,700	23,700	8,000
Hotel Circle South	16,400	23,300	6,900
Mission Center Road	38,000	38,700	700
First Avenue	12,200	15,000	2,800
Washington Street	44,700	46,700	2,000
Linda Vista Road	20,900	24,800	3,900
Morena Boulevard	28,400	32,700	4,300
Napa Street	12,200	13,500	1,300
Ulric Street	33,600	36,000	2,400

Fenton Parkway Connection over San Diego River to Mission City Parkway/Camino del Rio North
Projected Fenton Parkway Average Daily Traffic (ADT) Volumes:

- 13,800 ADT over San Diego River

Forecast Diverted Traffic Volumes without Fenton Parkway over SD River			
Freeway or Roadway Segment	FP IN Unadjusted ADT	FP OUT Unadjusted ADT	Delta ADT
I-15 SB	122,700	123,900	1,200
I-15 NB	134,000	135,500	1,500
Ramp from Friars Rd to I-8 WB	66,600	67,200	600
I-8 WB	131,900	132,600	700
I-8 EB	129,200	130,200	1,000
Friars Road east of Northside Dr.	51,700	55,800	4,100
Friars Road at SR 15 Interchange	83,300	86,400	3,200
Mission Village Drive at Stadium	47,000	48,900	1,900
Ward Road	17,600	20,400	2,800
Rio San Diego Drive	19,700	23,100	3,400
Camino del Rio North	9,700	11,800	2,100
Camino del Este	13,100	14,500	1,500
Qualcomm Way	30,600	33,700	3,100
Mission Center Road	24,300	25,100	700

Active Transportation, Transit

- Connections provide for a higher quality environment for pedestrians and cyclists.
- Connections allow pedestrians and cyclists to cross the river during a flooding event.
- Connections reduce traffic congestion on transit routes which improves the reliability of bus services in Mission Valley and other areas.
- Connections provide additional options for transit connectivity and improved bus routing.
- Connections improve access to one existing and two planned trolley stations for pedestrians, cyclists, shuttles, buses, and vehicles.